AIR QUALITY PERMIT

Issued To: Carlson Sand and Gravel, LLC

4405 Whitefish Stage Road

Whitefish, MT 59937

Permit #3304-00

Application Complete: 2/05/04

Preliminary Determination Issued: 3/16/04 Department Decision Issued: 04/01/04

Permit Final: 04/17/04 AFS #777-3304

An air quality permit, with conditions, is hereby granted to Carlson Sand and Gravel, LLC (Carlson), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Permitted Equipment

Carlson operates a portable crushing/screening facility at various locations throughout Montana. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Plant Location

Carlson operates a portable crushing/screening facility that will initially locate at the North $\frac{1}{2}$ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana. However, Permit #3304-00 would apply while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, and those areas considered tribal lands. Addendum 1 is included in this permit, to allow Carlson to locate in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas during the summer months (April 1-September 30). *A Missoula County air quality permit will be required for locations within Missoula County, Montana*.

Section II: Limitations and Conditions

A. Operational Limitations and Conditions

- 1. Carlson shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Sources (NSPS) affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR Part 60, Subpart OOO).
- 2. Carlson shall not cause or authorize to be discharged into the atmosphere from any other NSPS affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
- 3. Carlson shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).

- 4. Water and water spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
- 5. Carlson shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater averaged over six consecutive minutes and must take reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
- 6. Carlson shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
- 7. Crusher production from the facility shall be limited to 2,628,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 8. Carlson shall not operate more than one crusher at any given time and the maximum rated design capacity of the crusher shall not exceed 300 tons per hour (TPH) (ARM 17.8.749).
- 9. Total combined screen production from the facility shall be limited to 5,212,200 tons during any rolling 12-month time period (ARM 17.8.749).
- 10. Carlson shall not operate more than two screens at any given time and the cumulative maximum rated design capacity of the two screens shall not exceed 750 TPH (ARM 17.8.749).
- 11. Carlson shall not operate more than two diesel generators at any given time and the maximum combined rated design capacity shall not exceed 444 horsepower (HP) (ARM 17.8.749).
- 12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Carlson, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons of emissions during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- 13. Carlson shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

- 1. Within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR Part 60.675, must be performed on any NSPS affected equipment to demonstrate compliance with the emissions limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340, 40 CFR Part 60, Subpart A and Subpart OOO).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If this portable crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).
- 2. Carlson shall maintain on-site records showing daily hours of operation and daily production rates for the last 12-months. All records compiled in accordance with this permit shall be maintained by Carlson as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).
- 3. Carlson shall supply the Department with annual production information for all emission points, as required, by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.
 - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units as required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
- 4. Carlson shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745(1), that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
- 5. Carlson shall document, by month, the total crushing production for the facility. By the 25th day of each month, Carlson shall total the crushing production during the previous 12 months to verify compliance with the limitation in Section II.A.7. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. Carlson shall document, by month, the total screening production for the facility. By the 25th day of each month, Carlson shall total the screening production during the previous 12 months to verify compliance with the limitation in Section II.A.9. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).

- A. Inspection Carlson shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Carlson fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Carlson of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing postpones the effective date of the Department decision until the conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fees Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay of the annual operation fee by Carlson may be grounds for revocation of this permit, as required by that Section and rules adopted thereunder by the Board.
- H. Construction Commencement Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Carlson shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.

PERMIT ANALYSIS Carlson Sand and Gravel, LLC Permit Number 3304-00

I. Introduction/Process Description

A. Permitted Equipment

Carlson Sand and Gravel, LLC (Carlson) owns and operates a portable crushing/screening facility consisting of a portable 2003 matrix cone crusher (up to 300 tons per hour (TPH)) with an attached diesel engine (up to 335 horsepower (HP)), a 2003 (6'x12') Chieftain screen (up to 500 TPH) with an attached diesel engine (up to 109 HP), a 1995 (5'x15') Fabtec wash plant screen (up to 250 TPH), and associated equipment. The proposed original location for the facility is the North ½ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana. Permit #3304-00 will apply to the source while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, and those areas considered to be tribal lands. Addendum 1 is included in this permit, to allow Carlson to locate in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas, including specified locations within the nonattainment areas during the summer months. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*.

B. Process Description

Carlson proposes to use this crushing/screening plant and associated equipment to crush sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the crushing/screening plant by a hopper, transferred by conveyor, and passed through the crusher. Materials are crushed by the crusher and sent to the two screens. Material are screened, separated, and sent to stockpile for sale and use in construction operations.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

- 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).
 - Carlson shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.
- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Carlson must comply with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Carlson shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

- 4. <u>ARM 17.8.310 Particulate Matter, Industrial Processes.</u> This rule requires that no person shall cause or allow to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
- 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
- 6. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
- 7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60.

In order for a crushing/screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility and, second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Carlson, the 2003 matrix cone crusher, 2003 (6'x12') Chieftain screen, and 1995 (5'x15') Fab Tec wash plant screen are subject to NSPS requirements (40 CFR Part 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that Carlson submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Carlson submitted the required permit application fee for the current permit action.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees.</u> An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration to construct, alter, or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Carlson has a PTE greater than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), and oxides of nitrogen (NO_x); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis</u>
 <u>Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application
 Requirements. (1) This rule requires that a permit application be submitted prior
 to installation, modification, or use of a source. Carlson submitted the required
 permit application for the current permit action. (7) This rule requires that the
 applicant notify the public by means of legal publication in a newspaper of
 general circulation in the area affected by the application for a permit. Carlson
 submitted an affidavit of publication of public notice for the February 5, 2004,
 issue of the *Daily Interlake*, a newspaper of general circulation in the Town of
 Kalispell in Flathead County, as proof of compliance with the public notice
 requirements.
 - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 - 7. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.
 - 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
 - 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Carlson of the responsibility

- for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of Carlson, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and does not have a PTE greater than 250 tons per year (excluding fugitive emissions) of any air pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant.
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule.
 - c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.
 - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3304-00 for the Carlson facility, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 ton/year of all HAPs.
 - c. This source is not located in a serious PM_{10} nonattainment area.
 - d. This facility is not subject to any current NESHAP standards.
 - e. The facility is currently subject to NSPS standards (40 CFR 60, Subpart A, General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).
 - f. This source is not a Title IV affected source nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that this facility would be a minor source of emissions, as defined under the Title V Operating Permit Program. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Carlson will be required to obtain a Title V Operating Permit.

III. Emission Inventory

			Tons/Year					
Source	PM	PM_{10}	NO_x	VOC	CO	SO_x		
2003 Matrix cone crusher (up to 300 TPH)	3.29	1.58						
2003 (6'x12') Chieftain 2-deck screen (up to 500 TPH)	23.80	11.33						
1995 (5'x15') FabTec wash plant 3-deck screen (250 TPH)	10.35	4.93						
Material Transfer	21.91	10.58						
Pile Forming	25.39	12.09						
Bulk Loading	6.53	3.02						
Diesel Generator (109 HP)	1.05	1.05	14.80	1.18	3.19	0.98		
Diesel Generator (335 HP)	3.23	3.23	45.49	3.62	9.80	3.01		
Haul Roads	2.74	1.23						
Total	98.09	49.04	60.29	4.80	12.99	3.99		

• A complete emission inventory for Permit #3304-00 is on file with the Department. The facility was limited to 595 TPH from the two screens, in order to keep the PM₁₀ emissions below the Department PM₁₀ Modeling Guidance Threshold of 50 Tons Per Year.

IV. BACT Analysis

A BACT determination is required for any new or altered source. Carlson shall install on the new or altered source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be used.

Two types of emissions controls are readily available and used for dust suppression at the site and surrounding area of operations. These two control methods are water and chemical dust suppressant. Chemical dust suppressant can be used for dust suppression on the area surrounding the crushing/screening equipment and for emissions from the crushing/screening operations. However, because water is more readily available, is more cost effective, is as effective as chemical dust suppressant in controlling emissions upon the surrounding area of operations, is more environmentally friendly, and is more effective in controlling emissions from equipment operations, water has been identified as the most feasible method of pollution control of particulate emissions from crushing/screening operations and operations in the general plant area. In addition, water suppression has been required of recently permitted similar sources. However, the use of a chemical dust suppressant may be used to assist in controlling particulate emissions from the surrounding plant area.

Carlson shall not cause or authorize to be discharged into the atmosphere from the NSPS affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes. Also, Carlson shall not cause or authorize to be discharged into the atmosphere from the two affected screens, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. Further, Carlson shall not cause or authorize to be discharged into the atmosphere from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. Carlson must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. Carlson is required to use water spray bars, water, and chemical dust suppressant, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. The Department determined that using water spray bars, water, and chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the crushing/screening

operations.

Due to the amount of PM, PM_{10} , NO_x , CO, VOC, and SO_x emissions produced by the diesel generators, add-on controls would be cost prohibitive. The source is relatively small and would be required to comply with operational limits as outlined in Permit #3304-00. Thus, the Department determined that no additional control constitutes BACT for the generators. The control options selected have controls and control costs similar to other recently permitted similar sources and these controls are capable of achieving the established emissions limits.

V. Existing Air Quality

Addendum 1 of Permit #3304-00 would cover this portable crushing/screening plant while operating in or within 10 km of a PM_{10} nonattainment area during the summer months (April 1 through September 30), including the initial site location (the North ½ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana). Permit #3304-00 would also cover this facility while operating in areas classified as attainment or unclassified for ambient air quality standards.

VI. Air Quality Impacts

Based on the information provided and the conditions established in Permit #3304-00, the amount of controlled emissions generated by this facility will not exceed any set ambient air quality standards. Thus, the limitations and conditions established in Addendum 1 would further reduce emissions in these areas and would be protective of the ambient air quality standards. In addition, this source is portable and any air quality impacts will be minimal. The conditions in Permit #3304-00 will be protective of air quality while operating at locations not located in or within 10 km of certain PM_{10} nonattainment areas.

Addendum 1 Carlson Sand and Gravel, LLC Permit #3304-00

An addendum to air quality Permit #3304-00 is issued to Carlson Sand and Gravel, LLC (Carlson), pursuant to Sections 75-2-204 and 75-2-211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment

Carlson applied for Addendum 1 to Permit #3304-00 for the operation of a portable crushing/screening operation in or within 10 kilometers (km) of the following particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas: Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte.

II. Seasonal and Site Restrictions

Addendum 1 applies to the Carlson facility while operating at any location in or within 10 km of certain PM_{10} nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1-March 31) Carlson may not operate in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM₁₀ nonattainment area during the winter month.
- B. During the summer season (April 1-September 30) Carlson may operate at any location in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish.
- C. Carlson shall comply with the limitations and conditions contained in Addendum 1 to Permit #3304-00 while operating in or within 10 km of any of the previously listed PM₁₀ nonattainment areas. Addendum 1 shall be valid until revoked or modified. The Department of Environmental Quality (Department) reserves the authority to modify Addendum 1 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

A. Operational

- 1. Water spray bars must be operated on the crushers, screens, and all transfer points whenever the crushing/screening plant is operating (ARM 17.8.749).
- 2. All visible emissions from the crushing/screening plant may not exhibit an opacity of 10% or greater (ARM 17.8.749).
- 3. Carlson shall not cause or authorize to be discharged into the atmosphere from any other equipment, such as transfer points, any visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).

- 4. Carlson shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
- 5. Carlson shall treat all unpaved portions of the haul roads, access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
- 6. Crushing production from the crusher shall not exceed 7,200 tons during any rolling 24-hour time period (ARM 17.8.749).
- 7. Total screening production of the two screens shall be limited to 18,000 tons during any rolling 24-hour time period (ARM 17.8.749).

B. Operational Reporting Requirements

- 1. Carlson shall provide the Department with written notification of job completion within 10 working days of job completion (ARM 17.8.749).
- 2. Carlson shall provide the Department with written notice of relocation of the permitted equipment within 15 working days before the physical transfer of the equipment (ARM 17.8.765).
- 3. Production information for the sites covered by this addendum must be submitted to the Department with the annual emission inventory request or within 30 days of completion of the project. The information must include (ARM 17.8.749):
 - a. Tons of material crushed at each site
 - b. Tons of material screened by each screen at each site
 - c. Tons of bulk material loaded at each site
 - d. Daily hours of operation at each site
 - e. Gallons of diesel fuel used for the engines at each site
 - f. Fugitive dust information consisting of a listing of all plant vehicles including the following for each vehicle type:
 - i. Number of vehicles
 - ii. Vehicle type
 - iii. Vehicle weight, loaded
 - iv. Vehicle weight, unloaded
 - v. Number of tires on vehicle
 - vi. Average trip length
 - vii. Number of trips per day per vehicle
 - viii. Average vehicle speed
 - ix. Area of activity
 - x. Vehicle fuel usage (gasoline or diesel) annual total

- g. Fugitive dust control for haul roads and general plant area:
 - i. Hours of operation of water trucks
 - ii. Application schedule for chemical dust suppressant, if applicable
- 4. Carlson shall document, by day, the total crushing production. Carlson shall sum the total crushing production during the previous 24 hours to verify compliance with the limitation in Section III.A.6. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emission inventory (ARM 17.8.749).
- 5. Carlson shall document, by day, the total screening production. Carlson shall sum the total screening production during the previous 24 hours to verify compliance with the limitation in Section III.A.7. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted and may be submitted along with the annual emission inventory (ARM 17.8.749).

Addendum 1 Analysis Carlson Sand and Gravel, LLC Permit #3304-00

I. Permitted Equipment

Carlson Sand and Gravel, LLC (Carlson), owns and operates a portable crushing/screening facility consisting of a portable 2003 matrix cone crusher (up to 300 tons per hour (TPH)) with an attached diesel engine (up to 335 horsepower (HP)), a 2003 (6'x12') Chieftain screen (up to 500 TPH) with an attached diesel engine (up to 109 HP), a 1995 (5'x15') Fabtec wash plant screen (up to 250 TPH), and associated equipment.

II. Source Description

Carlson proposes to use this crushing/screening plant and associated equipment to crush sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the crushing/screening plant by a hopper and transferred by conveyor and passed through the crusher. Materials are crushed, by the crusher and sent to the two screens. Material are screened, separated, and sent to stockpile for sale and use in construction operations.

III. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

- A. ARM 17.8.749 Conditions for Issuance of Permit. This rule requires that the source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. Carlson demonstrated compliance with all applicable rules and standards as required for permit issuance.
- B. <u>ARM 17.8.764 Modification of Permit</u>. An air quality permit may be modified for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack which do not result in an increase in emissions because of the changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- C. <u>ARM 17.8.765 Transfer of Permit</u>. An air quality permit may be transferred from one location to another if:
 - 1. Written notice of Intent to Transfer location and proof of public notice are sent to the Department;
 - 2. The source will operate in the new location for a period of less than 1 year; and
 - 3. The source will not have any significant impact on any nonattainment area or any Class I area.

Carlson must submit proof of compliance with the transfer and public notice

requirements when Carlson transfers to any of the locations covered by this addendum and will only be allowed to stay in the new location for a period of less than 1 year. Also, the conditions and limitations in Addendum 1 to Permit #3304-00 will prevent Carlson from having a significant impact on certain PM_{10} nonattainment areas.

IV. Emission Inventory

		Lb/Day					
Source	PM	PM_{10}	NO_x	VOC	CO	SO_x	
2003 Matrix cone crusher (up to 300 TPH)	6.57	3.15					
2003 (6'x12') Chieftain 2-deck screen (up to 500 TPH)	63.60	22.67					
1995 (5'x15') FabTec wash plant 3-deck screen (250 TPH)	34.49	16.43					
Material Transfer	43.82	21.16					
Pile Forming	50.77	24.18					
Bulk Loading	12.69	6/04					
Diesel Generator (109 HP)	5.76	1.05	14.80	1.18	3.19	0.98	
Diesel Generator (335 HP)	17.69	17.69	249.24	19.86	53.71	16.48	
Haul Roads	15.00	6.75					
Total	234.39	119.12	264.04	21.04	56.90	17.46	

A complete emissions inventory for Permit #3304-00 is on file with the Department.

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for PM_{10} . Due to exceedances of the national standards for PM_{10} , the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM_{10} . As a result of this designation, EPA required the Department and the City-County Health Departments to submit PM_{10} State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies determined these sources to be the major contributors to PM_{10} emissions.

Addendum 1 to Permit #3304-00 is for a portable crushing/screening plant to be located at sites in or within 10 km of certain PM_{10} nonattainment areas during the summer season (April 1 through September 30). Summer season operations may include locations in or within 10 km of certain PM_{10} nonattainment areas, including, but not limited to Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish.

VI. Air Quality Impacts

Carlson applied for an air quality permit to operate a portable crushing/screening plant to be located at various locations throughout Montana. Permit #3304-00 and Addendum 1 will cover the Carlson crushing/screening plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program and those areas considered tribal lands. Based on the information provided, the amount of controlled emissions generated by this facility will not exceed any ambient air quality standard. In addition, this source is portable and any air quality impacts will be minimal.

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As required by 2-10-101 through 105, Montana Code Annotated (MCA), the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act (MEPA), was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permitting and Compliance Division Air Resources Management Bureau 1520 East Sixth Avenue P.O. Box 200901 Helena, Montana 59620-0901 (406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For:

Carlson Sand and Gravel, LLC

4405 Whitefish Stage Road Whitefish, MT 59937

Permit Number: #3304-00

Preliminary Determination Issued: March 16, 2004

Department Decision Issued: April 1, 2004

Permit Final: April 17, 2004

- 1. Legal Description of Site: Carlson submitted an application to operate a portable crushing/screening plant in the North ½ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana. Permit #3304-00 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered to be tribal lands, or those areas in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas. An addendum to this air quality permit will be required if Carlson intends to locate in or within 10 km of certain PM₁₀ nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana.
- 2. Description of Project: The permit application proposes the construction and operation of a portable crushing/screening plant that would consist of a portable 2003 matrix cone crusher (up to 300 tons per hour (TPH)) with an attached diesel engine (up to 335 horsepower (HP)), a 2003 (6'x12') Chieftain screen (up to 500 TPH) with an attached diesel engine (up to 109 HP), a 1995 (5'x15') Fabtec wash plant screen (up to 250 TPH), and associated equipment.
- 3. *Objectives of Project*: The object of the project would be to produce business and revenue for the company through the sale and use of aggregate. The issuance of Permit #3304-00 would allow Carlson to operate the permitted equipment at various locations throughout Montana, including the proposed initial site location.
- 4. *Additional Project Site Information*: In many cases, this crushing operation may move to a general site location or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, additional information for the site would be found in the Mined Land Reclamation Permit for that specific site.
- 5. Alternatives Considered: In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Carlson demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
- 6. A Listing of Mitigation, Stipulations, and Other Controls: A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #3304-00.

- 7. Regulatory Effects on Private Property Rights: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.
- 8. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no action alternative" was discussed previously.

		Major	Moderate	Minor	None	Unknow n	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
В.	Water Quality, Quantity, and Distribution			X			yes
C.	Geology and Soil Quality, Stability, and Moisture			X			yes
D.	Vegetation Cover, Quantity, and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource				X		yes
Н.	Demands on Environmental Resource of Water, Air, and Energy			X			yes
I	Historical and Archaeological Sites				X		yes
J.	Cumulative and Secondary Impacts			X			yes

Summary of Comments on Potential Physical and Biological Effects: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the crushing/screening operations. Impacts on terrestrial and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor, as the crushing/screening operations would be considered a minor source of emissions and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would have good pollutant dispersion in the area of operations (See Section 8.F). Also, the Flathead River is approximately ¾ mile away from the proposed operational site and, at such a distance, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed crushing/screening operation because only minor amounts of pollutants would reach the water body. Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed crushing/screening operation.

B. Water Quality, Quantity, and Distribution

Water would be required for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor disturbance to these areas, since only relatively small amounts of water would be needed. Therefore, at most, only minor surface and groundwater quality impacts would be expected as a result of using water for dust suppression because only small amounts of water would be required and deposition of air pollutants upon water bodies would be minor (as described in Section 8.F of this EA).

C. Geology and Soil Quality, Stability, and Moisture

The crushing/screening operations would have only minor impacts on geology and soil quality, stability, and moisture of soils and would generally locate within a previously disturbed open-cut pit. The deposition of air pollutants on soils would be minor (as described in Section 8.F of this EA) because relatively small amounts of pollution would be generated and pollutant dispersion would greatly minimize the impacts from the pollution. Therefore, any effects upon geology and soil quality, stability, and moisture at this proposed operational site would be minor.

D. Vegetation Cover, Quantity, and Quality

Minor, if any impacts would occur on vegetative cover, quality, and quantity because the facility would operate in an existing open-cut pit where vegetation has been previously removed/disturbed. The facility would be a relatively minor source of emissions and the pollutants would be greatly dispersed (as described in Section 8.F); therefore deposition on vegetation from the proposed project would be minor. Also, because the water usage would be minimal (as described in Section 8.B) and the associated soil disturbance from the application of water and any runoff would be minimal (as described in Section 8.C), corresponding vegetative impacts would be minor.

E. Aesthetics

The crushing/screening operation would be visible and would create additional noise while operating at this proposed site. However, Permit #3304-00 and Addendum 1 would include conditions to control emissions, including visible emissions, from the plant. The crushing/screening operation would be portable, operate on an intermittent and seasonal basis, and locate within an existing open-cut pit. Therefore, any visual aesthetic impacts would be minor.

F. Air Quality

Air quality impacts from the proposed project would be minor because the facility would be relatively small, operate on an intermittent and temporary basis and locate in a previously disturbed open-cut pit. Permit #3304-00 and Addendum 1 would include conditions limiting the facility's opacity, hours of operation, and the crushing/screening production. In addition, water spray bars and reasonable precautions would be required to control emissions from haul roads, access roads, parking lots, and the general work area. Permit #3304-00 would also limit total emissions from the crushing/screening facility and any additional Carlson equipment operated at the site to 250 tons/year or less, excluding fugitive emissions.

Further, the Department determined that the crushing/screening facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's potential to emit is below the major source threshold level of 100 tons per year for any regulated pollutant.

Pollutant deposition from the facility would be minimal because the pollutants emitted would be widely dispersed (from factors such as wind speed and wind direction) and would have minimal deposition (due to little vegetative cover and site topography) on the surrounding area. Therefore, good ventilation of pollutant emissions would only have minor effects upon surrounding soils, vegetation, water resources, human populations, and terrestrial and aquatic life. Therefore, air quality impacts from operating the crushing/screening equipment in this area would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) to identify any species of concern associated with the initial proposed site location (the North ½ of Section 21, Township 30 North, Range 21 West, in Flathead County, Montana). Search results concluded there are no known environmental resources of special concern within the area. The area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. Based on the small size and temporary nature of equipment operations, facility operations would take place in a previously mined site, and minimal disturbance to the environment (water, air, and soils) would occur in the area of operation, the Department determined no impacts to any unique endangered, fragile, or limited environmental resources would be expected to occur.

H. Demands on Environmental Resources of Water, Air, and Energy

Due to the relatively small size of the facility, the crushing/screening operation would only require small quantities of water, air, and energy for proper operation. Only small quantities of water would be required for dust suppression to control emissions being generated at the site. In addition, impacts to air resources would be minor because the source is a small industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed as described in Section 8.F of this EA. Energy requirements would also be small, as the facility would be powered by two small industrial diesel engines that would use minor amounts of fuel. Overall, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operations. According to past correspondence from SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial disturbance to an area. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed crushing/screening plant because the site has already been disturbed and because no previously recorded historical/archaeological sites have been identified at the location.

J. Cumulative and Secondary Impacts

The crushing/screening operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate emissions of PM, PM₁₀, NO_x, VOC, CO, and SO_x. Noise generated from the site would cause minor impacts because the crushing/screening operations would be seasonal and temporary. Emissions and noise would cause minimal disturbance because the site is an existing open-cut pit, currently designated and used for operations of aggregate mining. Additionally, this facility, in combination with other emissions from Carlson equipment operations would not be permitted to exceed 250 tons per year of non-fugitive emissions. Additional site restrictions are outlined in Addendum 1 and would be adjusted, as necessary, to protect ambient air quality in or within 10 kilometers of the PM₁₀ nonattainment areas identified in the addendum. No other sources are expected to operate as a result of permitting this equipment. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would be minor.

9. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no action alternative" was discussed previously.

		Major	Moderate	Minor	None	Unknow n	Comments Included
A.	Social Structures and Mores				X		yes
В.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities			X			yes
G	Quantity and Distribution of Employment				X		yes
H.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity			X			yes
K.	Locally Adopted Environmental Plans and Goals			X			yes
L.	Cumulative and Secondary Impacts			X		_	yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The crushing/screening operation would cause no disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, would be operating at an area designated and used for the mining of gravel, would be separated from the general population, and would only have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in Permit #3304-00 and Addendum 1, which would limit the effects to social structures or mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the proposed crushing/screening operation because the proposed site is currently designated and used for crushing/screening of aggregate, the proposed site is separated from the general population, and the facility will be a portable source, with seasonal and intermittent operations. The predominant use of the surrounding area would not change as a result of this project; therefore, the cultural uniqueness and diversity of the area would not be affected.

C. Local and State Tax Base and Tax Revenue

The crushing/screening operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a relatively small industrial source (minor source)

and would have seasonal and intermittent operations. The facility would require the use of only a few employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The crushing/screening operations would have only a minor impact on local industrial production since the facility would be a minor source of aggregate production and air emissions. Also, the facility would locate in an existing permitted open-cut pit, adjacent to an area that could be used for animal grazing and agricultural production. Therefore, because minimal deposition of air pollutants would occur on the surrounding land as described in Section 8.F of this EA, minor effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 8.D of this EA.

E. Human Health

Permit #3304-00 and Addendum 1 would incorporate conditions to ensure that the crushing/screening facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F. of this EA, the air emissions from this facility would be minimized by the use of water spray and other process limits that would be required by Permit #3304-00. Also, the facility would be operating on a temporary basis and pollutants would disperse from the ventilation of emissions at this site (see Section 8.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed crushing/screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the facility would be minor because the facility is a crushing/screening operation that would operate within an existing industrial site, between an existing hillside and whitefish stage road, in an area removed from the general population. As a result, the amount of noise generated from the crushing/screening operation would be minimal. Also, the facility would operate on a seasonal and intermittent basis at this existing pit site (on private land), and would be a relatively minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be expected to be minor and intermittent.

G. Quantity and Distribution of Employment

The portable crushing/screening operation is relatively small, would have seasonal and intermittent operations, and would only require a few employees to operate. No individuals would be expected to permanently relocate to this area of operation as a result of operating the crushing/screening facility. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The portable crushing/screening operation is small and would only require a few existing employees to operate. No individuals would be expected to permanently relocate to this area of operation as a result of operating the crushing/screening facility. Therefore, the crushing/screening facility would not disrupt the normal population distribution.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the

crushing/screening operation is in progress. In addition, government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be minor, due to the relatively small size and seasonal nature of the crushing/screening facility.

J. Industrial and Commercial Activity

The crushing/screening operation would represent only a minor increase in the industrial activity in the proposed area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

Carlson would be allowed, by Permit #3304-00 and Addendum 1, to operate in areas designated by EPA as attainment or unclassified and in certain areas designated as nonattainment. Permit #3304-00 and Addendum 1 would contain limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the facility would be a small and portable source and would have intermittent and seasonal operations, any impacts from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source is a portable and temporary source. Further, no other industrial operations are expected to result from the permitting of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by Carlson, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative effects would result to the local economy.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality - Permitting and Compliance Division (Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Department of Environmental Quality (Air Resources Management Bureau and Industrial and Energy Minerals Bureau), Montana State Historic Preservation Office (Montana Historical Society).

EA prepared by: Ron Lowney

Date: March 8, 2004